

litre (approximately 1.0 M). When the culture had attained a beta carotene concentration of 14mg per litre, the culture was pumped into the bottom of a vertical perspex cylinder of 100mm diameter at a rate of 1.65 litre per minute. When the cylinder became filled with liquid, 1,600g of magnetite (120 mesh) was introduced into the top of the cylinder. The magnetite moved towards the bottom of the cylinder but became suspended within the cylinder as a fluidised bed which maintained a height of 800mm. When the fluidised bed became stable, the culture which passed through the bed to the top of the cylinder was sampled and the beta carotene concentration was measured and found to be 0.06 mg per litre.--

END  
B<sub>3</sub>

IN THE CLAIMS:

Please amend claim 1 as follows:

--1. (amended) A method of extracting fat-soluble compounds from aqueous solutions, comprising:  
providing an aqueous solution in which a fat-soluble compound is present;  
providing a bed of crystalline metallic ore particles held in a vessel;  
applying the aqueous solution to the bed of crystalline metallic ore particles substantially near the bottom of the bed at a rate sufficient to form and maintain a fluidised bed of crystalline metallic ore particles;

B<sup>4</sup>

allowing the fat-soluble compound to attach to the crystalline metallic ore particles to form a crystalline-metallic-ore-fat-soluble-compound complex;  
providing a wash solution;  
contacting the wash solution with the crystalline-metallic-ore-fat-soluble-compound complex to desorb the fat-soluble compound from the complex;  
collecting the wash solution containing the fat-soluble compound;  
and  
isolating the fat-soluble compound from the wash solution.--

END  
B<sub>4</sub>

Please amend claim 4 as follows:

--4. (twice amended) A method as claimed in claim 1 wherein the wash solution is contacted with the crystalline-metallic-ore-fat-soluble-compound complex by applying the wash solution to the fluidised bed of crystalline metallic ore particles substantially near the bottom of the fluidised bed and at a rate sufficient to maintain the bed in a fluidised state and the resultant wash solution containing the fat-soluble compound is collected from substantially near the top of, or above, the fluidised bed of crystalline metallic ore particles.--

B<sup>5</sup>

Please cancel claim 13.

Please add the following new claims:

--15. (new) A method as claimed in claim 8, wherein the culture media is brine.

B<sup>6</sup>